

AMENDMENT TO THE CLAIMS

The following is a listing of the claims in the application with claims 1, 5, 9 and 10 shown as amended and claims 3, 4 and 8 shown as cancelled:

LISTING OF CLAIMS:

1. (Currently Amended) A method for preparing a film structure of a ferroelectric single crystal, which comprises the steps of: (a) forming a layer of a material having a perovskite crystal structure on a substrate as an electrode layer, the substrate being a ferroelectric single crystal substrate having an off-axis crystal structure relative to the C axis or a silicon single crystal substrate having a metal oxide layer of perovskite crystal structure on the surface thereof, and (b) growing a layer of a ferroelectric single crystal on the electrode layer by a pulsed laser deposition (PLD) or metallorganic chemical vapor deposition (MOCVD) method.

2. (Original) The method of claim 1, wherein the grown ferroelectric single crystal layer has a thickness of 0.1 to 20 μm .

Claims 3-4 (Cancelled).

5. (Currently Amended) The method of ~~claim 4~~ claim 1, wherein the ferroelectric single crystal substrate having an off-axis crystal structure has an off-axis angle of 0.1 to 10° with respect to the C axis.

6. (Original) The method of claim 1, wherein the electrode layer having the perovskite crystal structure is made of strontium ruthenate (SrRuO_3) or lanthanum nickelate (LaNiO_3).

7. (Original) The method of claim 1, wherein the electrode layer has a specific resistance of $9 \times 10^{-4} \Omega\text{cm}$ or less.

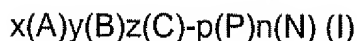
8. (Cancelled).

9. (Currently Amended) The method of claim-8 claim 1, wherein the metal oxide layer having the perovskite crystal structure is made of strontium titanate (SrTiO_3).

10. (Currently Amended) The method of claim-8 claim 1, wherein the electrode layer and/or metal oxide layer is formed by the method of PLD or MOCVD.

11. (Original) The method of claim 1, wherein the ferroelectric single crystal has a dielectric constant of 1,000 or greater as measured in a film form.

12. (Original) The method of claim 1, wherein the ferroelectric single crystal is LiNbO_3 , LiTaO_3 , $\text{La}_3\text{Ga}_5\text{SiO}_{14}$ or a material having the composition of formula (I):



wherein,

(A) is $\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3$ or $\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3$,

(B) is PbTiO_3 ,

(C) is LiTaO_3 ,

(P) is a metal selected from the group consisting of Pt, Au, Ag, Pd and Rh,

(N) is an oxide of a metal selected from the group consisting of Ni, Co, Fe, Sr, Sc, Ru, Cu and Cd,

x is a number in the range of 0.65 to 0.98,

y is a number in the range of 0.01 to 0.34,

z is a number in the range of 0.01 to 0.1, and

p and n are each independently a number in the range of 0.01 to 5.

13. (Original) The method of claim 1, which further comprises forming a conductive metal layer on the surface of the ferroelectric single crystal layer opposite to the electrode layer having the perovskite crystal structure, by a sputtering or an electronic beam evaporation method.

14. (Original) The method of claim 1, which further comprises oxidizing the substrate by heat-treatment to form a thin oxide film of 1 μm or less on the substrate.

15. (Previously Amended) A ferroelectric single crystal film structure prepared by a method according to claim 1.

16. (Original) An electric or electronic device comprising the ferroelectric single crystal film structure according to claim 15.